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FILE 'USPATFULL' ENTERED AT 10:43:46 ON 22 MAR 2001

L1 14 SEA ADVERTIS? PUBLISHER#
L2 287 SEA ADVERTIS? (P) AVAILABILIT?
L3 321 SEA ADVERTIS? (P) CAPACIT?
L4 21 SEA L2 AND L3
L5 10 SEA L4 (P) HOST?
L6 1 SEA US5568612/PN
L7 0 SEA L6 AND L5
L8 0 SEA TCP/IP
L9 4254 SEA "TCP/IP"
L10 1 SEA L5 AND L9
D
D FRO
D KWIC
L11 2 SEA (US5732219 OR US5696901)/PN
L12 18543 SEA ADVERTIS?
L13 1 SEA L12 AND L11
D KWIC
L14 82360 SEA AVAILABILITY
L15 360043 SEA CAPACITY
L16 0 SEA L11 AND L14
L17 0 SEA L11 AND L15
L18 1 SEA L6 AND L12
L19 0 SEA L18 AND L14
L20 1 SEA L18 AND L15
D KWIC
L21 147 SEA CLIENT# (P) REMOTE? CONTROL?
L22 0 SEA L6 AND L21
L23 1 SEA L6 AND REMOT?
D KWIC
L24 1 SEA HOST? AND L6
D KWIC
L25 1 SEA L6 AND L9
D KWIC

FILE HOME

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 20 Mar 2001 (20010320/PD)

FILE LAST UPDATED: 20 Mar 2001 (20010320/ED)

HIGHEST PATENT NUMBER: US8345926

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ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 20 Mar 2001 (20010320/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2000

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>>> Page images are available for patents from 1/1/1997. Current <<<
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>>> is included in file records. A thesaurus is available for the <<<
>>> USPTO Manual of Classifications in the /NCL, /INCL, and /RPCL <<<
>>> fields. This thesaurus includes catchword terms from the <<<

>>> USPTO/MOC subject headings and subheadings. Thesauri are also <<<
>>> available for WIPO International Patent Classification <<<
>>> (IPC) Manuals, editions 1-6, in the /IC1, /IC2, /IC3, /IC4, <<<
>>> /IC5, and /IC (/IC6) fields, respectively. The thesauri in <<<
>>> the /IC5 and /IC fields include the corresponding catchword <<<
>>> terms from the IPC subject headings and subheadings. <<<

This file contains CAS Registry Numbers for easy and accurate
substance identification.

Media-Dependent
Receive Statistic

Description

CRC Total number of Cyclic Redundancy Check errors detected by the LBP-Remote

Missed Frames Number of packets missed due to lack of space in the receive buffer, or the controller is in the. . .

DETD . . . upon any device external to the printer. Furthermore, the initial default configuration may be loaded and subsequently modified from a **remote** location over the LAN through the NEB's serial or parallel interfaces.

DETD 4n. Downloading Executable Files Into The NEB From A Remote LAN Location

DETD . . . updated executable files across the LAN from the network administrator's PC 14 to the NEB 2. Furthermore, network administrator can **remotely** alter the executable files stored in DRAM 220 of NEB 2, as desired.

DETD Thus, the network administrator can alter the operation of NEB 2 by **remotely** sending new operational files to be stored and to be executed from DRAM 220.

DETD . . . and address bus 251 is DRAM 220. DRAM 220 is capable of storing a ROM firmware image downloaded from a **remote** LAN device into one portion of its memory area (see section 4o above), and application process steps into another portion. . .

DETD 4q. **Remotely** Altering Firmware

DETD The method for **remotely** altering firmware in EPROM 222 will be discussed in more detail below and with reference to the flowchart illustrated in. . .

DETD . . . However, the NEB can be reconfigured subsequently by the customer. That is, a network administrator may download data from a **remote** LAN device, which data may contain anything from a patch code, to manufacturing test routines, to entire firmware updates to. . .

DETD . . . by sending executable files across the LAN from the network administrator's PC 14 to NEB 2. The network administrator can **remotely** alter the ROM firmware image in EPROM 222, as desired.

DETD . . . still be stored in a non-volatile way. (Of course, as discussed in paragraph 4q, the MAC address could also be **remotely** flashed into the EPROM at the same time the RAM firmware image is updated, after NEB 2 is coupled to. . .

=> s host? and l6

107742 HOST?
L24 1 HOST? AND L6

=> d kwic

L24 ANSWER 1 OF 1 USPATFULL
PI US 5568612 19961022

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SUMM . . . merely accepting information from the LAN and printing such information on a hard copy. Moreover, such printers usually required a host personal computer ("PC") to effectively manage the flow of data to the printer, i.e., to act as a "server" for the printer. This almost always required that the host PC be dedicated solely to the printer server task.

SUMM . . . those servers are available. This is because the Novell-compatible Server Advertising Protocol ("SAP") assumes that each network node is the host to only a single network server. Accordingly, even if more than one server were provided in a single network node, . . .

=> s 16 and 19

L25 1 L6 AND L9

=> d kwic

L25 ANSWER 1 OF 1 USPATFULL

PI US 5568612 19961022 <--

DETD . . . Ethernet data received over the LAN may be one of the following

software protocols: e.g. NetWare.RTM. over SPX/IPX; UNIX over TCP/IP; or Mac Systems 7 over AppleTalk. Basically, the software protocol type may be determined according to the frame packet type. . . .

DETD . . . over a LAN bus using SPX/IPX operating protocol, while a UNIX-compatible operating system communicates over the LAN bus using a TCP/IP operating protocol. Other operating systems, such as the AppleTalk.RTM. operating system provided by Apple Corporation, use respectively different operating protocols. . . .

DETD UNIX-compatible operating protocols are illustrated at reference numerals 335, 336 and 337. More specifically, 335 and 336 comprise a TCP/IP operating protocol stack (or tower) by which UNIX-compatible application programs communicate to LAN bus 6 via LSL. UNIX-compatible network application. . . .

DETD . . . UNIX operating system to use the same frame packet type; it is the operating system protocols (SPX/IPX for Novell and TCP/IP for UNIX) which determine which one of the operating systems in a multiprotocol environment is currently communicating on the LAN.

. . . .

DETD . . . which has the proper IPX header. Then, PRESCAN binds simultaneously through LSL through all three frame packet types having a TCP/IP protocol tower. PRESCAN determines the frame packet type being used by the UNIX-compatible operating system in accordance with the data group having the proper TCP/IP header.

DETD . . . LSL to bind simultaneously to a plurality of frame packet types corresponding to the second operating system protocol, such as TCP/IP for a UNIX operating system. The network driver monitors the LAN communication bus to capture broadcast traffic for the second. . . . the packet types. The PRESCAN module prescans each data group for the presence of a predetermined header, such as the TCP/IP header for UNIX, and stores the frame packet type corresponding to the data group having the predetermined header.

L7 ANSWER 1 OF 1 USPATFULL

PI US 5568612 19961022

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a

TCP/IP protocol tower. PRESCAN determines the frame packet type being used by the UNIX-compatible operating system in accordance with the data group having the proper TCP/IP header.

DETD . . . LSL to bind simultaneously to a plurality of frame packet types

corresponding to the second operating system protocol, such as TCP/IP for a UNIX operating system. The network driver monitors the LAN communication bus to capture broadcast traffic for the second. . . . the packet types. The PRESCAN module prescans each data group for the presence of a predetermined header, such as the TCP/IP header for UNIX, and stores the frame packet type corresponding to the data group having the predetermined header.

L11 ANSWER 1 OF 1 USPATFULL

PI US 5568612 19961022

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DETD

. . . Printer

NEB-to-Network

CPSOCKET (30KB)

Concurrent multi-
protocol operation

communication in

NEB EPROM

NEB Environment in (15KB)

Monitor, loader,
POST, etc.

NEB EPROM

Extensions to

CPCONSOL.EXE

(180KB)

Remote Control &
Stats, Auto-

NetWare .RTM.

PCONSOLE for Printer

CPINIT.EXE

(120KB)

Reconfiguration,
Print Job

Control/Configuration

in Administrator's

Logs/Statistics

PC 14

DETD In summary, at Step S28, a method for **remotely controlling** a manually-operable function of a networked printer through an interactive network board having a LAN interface for LAN communication, comprises. . .

and downloading of new applets. To ensure widespread **availability** of the new features made possible by the present architecture, the customer premise equipment may be provided to end users. . . . being amortized over the services sold to the user through the equipment. Additionally, the service provider may collect fees from **advertisers** to subsidize the cost of the equipment.

DETD . . . as an IP proxy server such that each of the devices connected to the server utilizes transmission control protocol/Internet protocol (TCP/IP) protocol. This configuration allows any device associated with the ISD to access the Internet via an IP connection through the. . . the ISD 22 is configured as an IP proxy server, it may accommodate additional devices that do not support the **TCP/IP** protocol. In this embodiment, the ISD 22 may have a proprietary or conventional interface connecting the ISD 22 to any. . .

DETD . . . two or more twisted pair connected with the local office. The videophone can contain Win32 application programable interfaces (APIs) supporting **TCP/IP**, POP3, RAS, and TAPI protocols with a built in browser. One of the twisted pair will access the AT&T server. . . .

DETD A requirement of the touch screen services is **availability** of a data link to the server. In later phases of implementation, a DSL link to the home is provided. . . . built-in motion detector is triggered by someone nearby. During these periods of local presence, the AT&T server will put up **advertising** and personal information on the screen and be available to support touch activated services (e.g., calling, CLASS services), and directory. . . .

DETD . . . (LAN) Intranet access (FIGS. 13 and 14). For business customers, the architecture supports secure electronic commerce and personalized delivery of **advertising** to consumers with the **capacity** to tailor the **advertising** campaign to the consumer's profile (FIG. 17).

CLM What is claimed is:

13. A network server platform of a telecommunications network for **hosting** a plurality of services, said network server platform comprising a memory for storing a user profile, said user profile containing. . . .

14. A network server platform of a telecommunications network for **hosting** a plurality of services, said network server platform comprising a memory for storing a user profile, said user profile containing. . . .

cls 26-27

L4 ANSWER 1 OF 1 USPATFULL

PI US 5568612 19961022

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DETD . . . CRPRINTER. If CPSEVER is selected, it is necessary to
designate the name of the print server assigned to the NEB,
password, application buffer size, queue service mode, form
numbers, the printer number of the printer in which the NEB resides,
the. . .

L10 ANSWER 1 OF 1 USPATFULL
United States Patent

Patent Number: 6044403
Date of Patent: 28 Mar 2000

Network server platform for internet, JAVA server and video application server

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Filed: 31 Dec 1997

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Current U.S. Cl. 709/225.000; 709/217.000; 709/223.000; 709/238.000
Field of Search 709/201; 709/202; 709/203; 709/217; 709/219; 709/223;
709/224; 709/225; 709/227; 709/229; 709/238; 709/300;
709/250

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Art Unit - 278

Primary Examiner - Vu, Viet D.

14 Claim(s), 21 Drawing Figure(s), 21 Drawing Page(s)

ABSTRACT

A new architecture capable of utilizing the existing twisted pair interface between the customer services equipment and the local office is used to provide a vast array of new services to customers. Using an intelligent services director (ISD) at the customer services equipment and a facilities management platform (FMP) at the local office, new services such as simultaneous, multiple calls (voice analog or digital), facsimile, Internet traffic and other data can be transmitted over the existing single twisted pair using xDSL transmission schemes. New services such as the implementation of Internet connectivity, videophone, utility metering, broadcasting, multicasting, bill viewing, information pushing in response to a user profile, directory look-up and other services can be implemented via a network server platform via this architecture. A network server platform for **hosting** a plurality of services comprises, for example, a memory for storing a user profile, the user profile containing interests of a user, and for storing information related to their interests and a controller for controlling the collection of information from information servers and for pushing the collected information to the user in accordance with their defined priority.

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L10 ANSWER 1 OF 1 USPATFULL

AB . . . look-up and other services can be implemented via a network server platform via this architecture. A network server platform for **hosting** a plurality of services comprises, for example, a memory for storing a user profile, the user profile containing interests of.

SUMM . . . connected device and dedicated applications for specific devices such as bill viewing from a video phone. The network server platform **hosts** the plurality of services and comprises, for example, a memory for storing a user profile, the user profile containing interests. . . .

DETD . . . to the FMP 32 and thereafter to the NSP 36 for reinitialization

L11 ANSWER 1 OF 1 USPATFULL

PI US 5568612 19961022

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DETD

. . . Printer

NEB-to-Network

CPSOCKET (30KB)

Concurrent multi-
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NEB EPROM

NEB Environment in (15KB)

Monitor, loader,
POST, etc.

NEB EPROM

Extensions to

CPCONSOL.EXE

(180KB)

Remote Control &
Stats, Auto-

NetWare .RTM.

PCONSOLE for Printer

CPINIT.EXE

(120KB)

Reconfiguration,
Print Job

Control/Configuration

in Administrator's

Logs/Statistics

PC 14

DETD In summary, at Step S28, a method for **remotely controlling** a manually-operable function of a networked printer through an interactive network board having a LAN interface for LAN communication, comprises. . .

L3 ANSWER 2 OF 2 USPATFULL

PI US 5568612 19961022

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DETD . . . are provided between a plurality of LANs, as shown in FIG. 2,
such that resources, including printers, can be shared "**internet**
" i.e., from one LAN to another.